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## ABSTRACT OF THE DISCLOSURE

A method for designing tree-structured communication routes, in which plural ingress nodes, a single egress node, plural connection nodes situated between the plural ingress nodes and the single egress node, and plural routes starting from the plural ingress nodes to the single egress node via the plural connection nodes are given, comprises the steps of:

adding a predetermined point to a score of a route successively selected from the plural routes,

successively selecting the routes in reverse order of the scores of the routes,

respectively generating trees from the route with the lowest score and the other routes, and

successively generating other trees from the routes which are unable to generate the trees,

wherein the step of adding the predetermined point to the score of the selected route is carried out whenever either of

- (1) a first condition that any node in a selected route does not appear on the other route except the egress node, or
- (2) a second condition that, when there is a node which appears in both the selected and other routes, the selected route agrees with the other route from the node to the egress node,

is satisfied.

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